The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for making an optical fiber preform comprising the steps of:

providing relative reciprocating motion between at least one soot producing burner and a consolidated glass rod, the soot producing burner combusting a hydrogen-containing fuel;

depositing from the soot producing burner a first layer of glass soot having a thickness greater than about 5 mm but less than about 20 mm along a length of the consolidated glass rod at a first traverse rate in a first direction;

depositing a second layer of glass soot onto the first layer of glass soot at a second traverse rate in the first direction without sintering the first or second soot layers; and

wherein the first traverse rate is greater than the second traverse rate and a peak concentration of OH within 100 μm of the surface of the glass rod after depositing the first or second layer of soot is less than 0.200 ppm by weight.

2. (Original) The method according to claim 1 wherein the first traverse rate is at least about 7 cm/s.

3. (Original) The method according to claim 2 wherein the first traverse rate is at least about 10 cm/s.

4. (Canceled).

5. (Canceled).

6. (Original) The method according to claim 1 wherein a traverse rate in a second direction opposite the first direction is greater than the first traverse rate in the first direction.

7. (Original) The method according to claim 6 wherein a deposition rate during a traverse in the second direction is substantially zero.

8. (Original) The method according to claim 1 wherein the step of depositing a second layer of glass soot comprises depositing soot with at least two soot deposition burners.

9. (Original) The method according to claim 8 further comprising operating the at least two burners under conditions such that a temperature of a flame of a second burner of the at least two burners is less than a temperature of a flame of a first burner of the at least two burners.

10. Canceled

11. (Previously Amended) The method according to claim 1 wherein a diameter of the glass rod is at least about 28 mm.

12. (Previously Amended) The method according to claim 11 wherein a diameter of the glass rod is at least about 32 mm.

13. (Original) The method according to claim 1 wherein the step of providing relative reciprocating motion comprises attaching the glass rod to a movable support and traversing the movable support relative to the at least one burner.

14. (Original) The method according to claim 13 further comprising applying a damping force to a movement of the movable support at a turnaround point by moving a piston through a viscous fluid.

15. (Withdrawn) An apparatus for depositing soot onto a glass rod comprising:

at least one glass soot producing burner;

a movable support for mounting a glass rod; and

at least one damping device comprising a piston and a viscous fluid mounted for cooperation with the support and aligned to inhibit a movement of the support at a first turnaround point.

16. (Withdrawn) The apparatus according to claim 15 wherein the damping element stores kinetic energy from the movable support and then releases it at about the turnaround point.

17. (Currently Amended) A method for making an optical fiber preform comprising the steps of:

providing relative reciprocating motion between at least one soot producing burner and a consolidated glass rod;

depositing a first layer of glass soot along a length of the consolidated glass rod at a first traverse rate in a first direction;

depositing a second layer of glass soot onto the first layer of glass soot at a second traverse rate in the first direction without sintering; and

wherein the first traverse rate is greater than the second traverse rate and a temperature of a surface of the glass rod does not exceed about 780°C ~~960°C~~.

18. Canceled.

19. (Previously Presented) The method according to claim 17 wherein the temperature of the surface of the glass rod does not exceed 640°C.